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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/796,206

03/10/2004

Ju-Yeon Lee

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EXAMINER

ALI, MOHAMMAD M

ART UNIT

PAPER NUMBER

3744

DATE MAILED: 07/20/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/796,206

Applicant(s)

LEE, JU-YEON

Examiner

Mohammad M. Ali

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 June 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3-6 and 8-36 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 3-6 and 8-36 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Drawings

The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the “at least one outlet being provided in all directions” for claims 4, 9, must be shown or the feature(s) canceled from the claim(s). No new matter should be entered. The Figs. Do not show air outlets to all direction except to some particular directions.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as “amended.” If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either “Replacement Sheet” or “New Sheet” pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter, which the applicant regards as his invention.

Claims 4-6, 8-13, 16-17, 19-20, 22-25, 27-28, 31-32 and 34-36 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The air outlet or airflows out to all direction is an indefinite disclosure.

Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 14-15, 21, 26, 29, 30, 33 are rejected under 35 U.S.C. 102(b) as being anticipated by Hino (JP 9-327614 A). Hino discloses a thermoelectric air conditioning device comprising a wearable cooler, a thermoelectric module 2 providable on clothes or (on clothes of a user/rain coat) for absorbing and discharging heat according to an electric current; at least one first heat sink 3 provided at a first side of the thermoelectric module 2; at least one heat sink 3 being provided at an outside of the clothes at least one second heat sink 4 provided at a second side of the thermoelectric module 2, the second side being opposite of the first side; and at least one fan 6 provided at the first side of the thermoelectric module 2 for causing air to flow through the at least one first heat sink 3, wherein the at least one fan 6 is placed directly above the corresponding at

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least first heat sink 3; a second fan 7 provided at the second side of the thermoelectric module 2 for causing air to flow through the second heat sink 4; and external case having at least one air inlet, and at least one air outlet, and surrounding the at least first heat sink 3 and the at least one first fan 6, contact guard (the fans supports), a projection part/vertical wall 74, heat sinks cavity portions (where the fans 6 and 7 are located), a electric control switch actuation box 15 (controlling fan, and air-conditioning); wherein the at least one second heat sink 4 includes a space at a skin side opposite to a side near to the thermoelectric module 2, for containing at least one second fan 7, the second fan 7 being placed within a cavity portion of the second heat sink 4. See Figs 1-3 and the encloses translation.

. See Fig.1-4.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 4-6, 9-12, 16-17, 19-20, 22-25, 27-28, 31-32, 34-36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hino. Hino discloses the invention substantially as claimed as stated above except air outlet to all directions, which Applicant also fails to do so. However, Applicant discloses four possible air outlet directions where Hino discloses three possible air outlet directions and it is an obvious

design choice to have three or four possible directions of air outlets since there is no criticality or unexpected result from it.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 3, 8, 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hino in view of Strauss (6,543,247). Hino discloses the invention substantially as claimed as stated above. However, Hino does not disclose an axial fan. Strauss teaches the use of an axial fan in a portable cooler with thermoelectric device for the purpose of airflow. See column 7, lines 12-14. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the thermoelectric air conditioning device of Hino in view of Strauss such that an axial fan could be provided in order to provide airflow.

Claims 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hino et al., in view of Bell et al., (20030029173). Hino discloses the invention substantially as claimed as stated above. However, Hino, does not disclose adjustable air outlet. Bell et

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al., teach the use of adjustable louver 121 in a thermoelectric cooler for the purpose of controlling the conditioned air according the user need. See Fig.1. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the surgical suit of Hino in view of Bell et al., such that an adjustable louver could be provided in order to control the direction of air flow as per need of a user.

Claim 18 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hino in view of Balkind et al., RU 2122658 C1. Hino discloses the invention substantially as claimed as stated above. However, Hino does not disclose a gauze. Balkind et al., teach the use of gauze which is directly below a second heat exchanging surface 70 with fins/heat sink in a thermoelectric heat exchanging system for the purpose of observing pressure of air exchanging heat and directing the air over the heat sink. See translated abstract. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the surgical suit of Hino in view of Balkind et al., such that a gauze could be provided in order to observe the pressure of air flow exchanging heat.

Response to Arguments

Applicant's arguments filed 06/28/06 have been fully considered but they are not persuasive for withdrawing the finality on account of a simple mistake for positioning the claim 14 with claim 10 for 103 rejection. However, considering customer satisfaction the last finality has been withdrawn. However, upon further consideration, a new ground(s)

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of rejection is made in view of new prior art. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mohammad M. Ali whose telephone number is (571) 272-4806. The examiner can normally be reached on Monday to Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Cheryl Tyler can be reached on (571) 272-4834. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.


MOHAMMAD M. ALI
PRIMARY EXAMINER